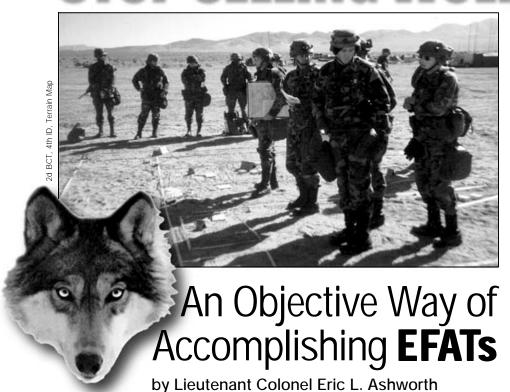
STOP SELLING WOLF-TICKETS



ave you ever sat in a Field Artillery support plan briefing and asked yourself, "Can this unit handle all these EFATs [essential FA tasks]?" Remember, as artillerymen, if we say we can accomplish a mission, there's a Grunt out there who will put his life on the line, believing we will meet our objectives. To help our fellow soldiers, we must be realistic in portraying what we can and can't do before the first bullet is ever fired. Easier said than done, right?

One method to determine if we can accomplish our EFATs was used by 6th Battalion, 27th Field Artillery (6-27 FA) multiple-launch rocket system (MLRS) during our National Training Center (NTC) rotation at Fort Irwin, California. The method didn't work perfectly in every battle; however, one thing it did was help us and the direct support (DS) unit we were reinforcing (3-16 FA) in the decision-making process by determining which FA unit could meet each task given to the force FA head-quarters.

This article discusses the four steps in the determination process, focusing on Class V issues as a primary example. However, the process easily works (and should be worked) for all classes of supply. To simplify the example, an MLRS unit is used due to the limited number of ammunition types capable of being fired by the MLRS battalion, although the method will work for any artillery battalion.

6-27 FA had a general support reinforcing (GSR) mission to support 3-16 FA. A Battery, 6-27 FA, had been detached to fire Army tactical missile system (ATACM) missions for X Corps, leaving 6-27 FA in control of two batteries (18 launchers). Our mission was to fire an eight-target suppression of enemy air defenses (SEAD) plan in support of a division deep attack and provide counterfire to destroy the 52d Division Artillery Group (52d DAG). All other launchers could be used in reinforcing the fires of 3-16 FA.

Initially, the plan was for the maneuver brigade combat team—2d BCT, 4th Infantry Division (Mechanized)—to attack a motorized rifle company (MRC) while 6-27 FA defeated the other two MRCs in the enemy covering force. 2d BCT also asked the artillery to keep the 46th Regimental Artillery Group (46th RAG) from influencing the maneuver force. Finally, 3-16 FA asked 6-27 FA to mass along the point of penetration (POP). 3-16 FA had the missions to

provide DS fires for the BCT, fire all smoke missions and provide SEAD for an air insertion.

When the brigade commander first gave us our missions, we wanted to say, "Yes, Sir, we've got you *covered*." Here was a maneuver commander who really was using his artillery. But could we realistically meet all these EFATs?

We used four steps to answer that question: analyze your assigned tasks, know the enemy, know your capabilities and do the math. Once completed, these steps quickly told us realistically if we could accomplish the EFATs and which ones we needed to revise.

Step 1: Analyze Your Tasks. I once worked for a maneuver commander who told me his artillery support had only two tasks: keep the enemy from impeding his maneuver plan during offensive operations and disrupt the enemy scheme of maneuver so the enemy couldn't mass on his attack objective during defensive operations. Although this guidance leaves room for interpretation on how to get the tasks done, I was surprised he never stressed that artillery needed to *kill* stuff.

Often, we artillerymen get focused on how much we are killing without really analyzing whether our fires are achieving the desired endstate. Is the current rate of fire ensuring we have the capabilities to mass when needed? To keep the enemy from supporting the POP, can we afford to place suppressive fires on the enemy and, thus, conserve ammunition? It's important to ask about and understand the specific tasks before determining options to get the job done.

Another chance for misunderstanding the EFATs is in the military definitions in operations orders (OPORDs). Does everyone have the same understanding of these definitions? Does the word "destroy" mean the same to an artilleryman as it does to an armor battalion commander? What exactly constitutes "destroying" an enemy unit?

OPORDs are filled with terms like "defeat," "suppress" and "secure the objective." These are great terms for a commander or staff to forward guidance. However, to determine the details of how to accomplish the required tasks, maneuver and fire support must discuss exactly what they mean and what's expected for each task.

The first task we had a question on was the 4th Division Artillery's (Div Arty's) request for 6-27 FA to "destroy the 52d DAG." After asking the Div Arty S3 to be more specific, he said he wanted two of every three batteries in every enemy artillery battalion in the 52d DAG to be incapable of firing. Although forcing the DAG to move would make it difficult to fire effectively, he requested specifically for casualties to degrade the DAG's command and control. Casualties of this amount should make command and control almost non-existent. With these specifics, we established the EFAT would be to provide counterfire to destroy 67 percent of all tubes and launchers within the DAG.

The next question we had was about the 2d BCT's request to defeat two MRCs. Further guidance explained that 50 percent armored vehicle causalities within both of these MRCs would degrade MRCs' ability to support the defense of the enemy's third MRC. Overall, the goal was to keep these forces from displacing during the battle to support the MRC in contact.

The brigade would insert combat observation lasing teams (COLTs) to report accurate grid locations to targets. Suppression or obscuring these targets was considered an option if ammuni-

tion was tight. Therefore, the EFAT was to defeat two MRCs of the 46th Motorized Rifle Regiment (MRR) by destroying 50 percent of the armored vehicles in each MRC.

We continued this process to cover all our questions. 3-16 FA had tasked 6-27 FA to provide counterfires to destroy 67 percent or more of the tubes of the 46th RAG and the request to "mass" at POP was better defined as having the capability to fire three 12-rocket missions at targets of opportunity.

Could we meet all these requirements? At this point, we didn't know, but at least we understood our assigned tasks.

Step 2: Know the Enemy. The next step is to visit your S2. The bottom line is you've got to know what's in each enemy unit before you can determine what you need to destroy in it. Understanding the commander's intent and knowing the enemy's disposition tied to each of the maneuver commander's tasks led the 6-27 FA staff to the information outlined in Figure 1.

Step 3: Know Your Capabilities. This step is nothing more than assessing your unit's capabilities against each EFAT. 6-27 FA uses a chart we received from the NTC (Figure 2) to help calculate the amount of ammunition required to destroy specific weapon types. The figure

shows the casualty assessments expected per target type based on the number of M26 MLRS rockets fired (listed across the top). A similar chart can be produced for other artillery systems or, at a minimum, you can use the attack guidance matrix (AGM) published in the OPORD.

Next, you determine what the size of the target is you are shooting at. This helps determine how much ammunition you should expend on each fire mission.

Because two of our EFATs focused on destroying enemy artillery systems and we knew the enemy fought with artillery battery formations, we quickly determined that 12-rocket (two-pod) fires per battery target would take out five of the enemy's six artillery pieces (see Figure 2). This was greater than the 67 percent destruction required. Therefore, for the destruction of the 46th RAG and 52d DAG, we determined that one hit of an enemy artillery battery with 12 MLRS rockets essentially would cause that battery to be combat ineffective.

For the SEAD targets, the Div Arty provided an eight-target fire plan and specified six rockets per target.

In the case of the MRC targets, the maximum number of systems we reasonably could expect to destroy per fire mission was one (given that the vehicles in the MRC likely would be dispersed or, possibly, moving). We also could not be sure the observers would be positioned to determine the target type in the MRC (and, therefore, the number of rockets required for the kill), so we decided to fire six rockets per target—the number required for a tank kill. This assured we'd use sufficient ordnance to destroy any target in the MRC.

How sure are you that each fire mission will hit the target? Answering this question determines the "accuracy factor" or the number of times you must shoot the required rockets at a given target before you are confident you killed it. In counterfire operations, this equals how rapidly you can conduct your counterfire battle drill as compared to how fast the enemy artillery systems can displace.

We believed we were trained to the standard that we would always hit the 2S1 and 2S5 battalions within their seven-minute displacement time. Therefore, for these weapon systems, our accuracy factor was 1.0 or one fire mission with one battery killed. For the 2S19 battalions, we subjectively determined that we could hit these units 33

- EFAT #1: Fire SEAD to destroy eight light-skinned air defense targets along the division air attack route.
- **EFAT #2:** Provide counterfire to prevent the DAG from affecting the friendly breaching site. The required effects are to destroy 67 percent of all tubes within the DAG. The 52d DAG consisted of 18 2S5 guns with an expected displacement time of seven minutes, 18 BM-21 MRLs with an expected displacement time of two minutes and 18 2S19 guns with an expected displacement time of three minutes.
- EFAT #3: Defeat two MRCs of the 46th MRR to prevent them from supporting the third MRC. Effects required are the destruction of 50 percent of the armored vehicles in each MRC. Each MRC was estimated to have three T-80 tanks and 10 BMPs.
- EFAT #4: Provide counterfire to prevent effective fires from the RAG on friendly forces. Effects required are to destroy 67 percent of all tubes within the RAG. The 46th RAG consisted of 18 2S1 guns with an expected displacement time of seven minutes and 36 2S19 guns with an expected displacement time of three minutes.
- **EFAT #5:** Mass along the breaching site to support the battalion task force's seizing of the maneuver objective. 3-16 FA requested 36 rockets (six pods) available for targets of opportunity along the axis of attack.

Legend:

BMPs = Soviet-Made Tracked Infantry Combat Vehicles

DAG = Division Artillery Group MRCs = Motorized Rifle Companies

MRLs = Multiple-Rocket Launchers MRR = Motorized Rifle Regiment

RAG = Regimental Artillery Group

SEAD = Suppression of Enemy Air Defenses

Figure 1: Sample Essential Field Artillery Tasks (EFATs)

percent of the time—an accuracy factor of 3.0 on the average. This meant we had to shoot the target three different times before we could be confident we destroyed it.

We believed we could beat the twominute BM-21 displacement time 25 percent of the time (accuracy factor of 4.0). So we had to fire on each BM-21 target four times to be confident we destroyed it.

For all other targets, observers could determine the location of the target and guarantee the targets would be stationary. We gave these targets an accuracy factor of 1.0.

Later, T-80 tank targets were adjusted to an accuracy factor of 2.0 due to the fact they were dug in. The matrix in Figure 2 shows a tank target in the open requires a minimum of six rockets to destroy. We conservatively decided we might have to fire six rockets on the dug-in tank twice before it became inoperative.

Some may claim this step is too subjective. However, each unit is unique and needs this subjectivity to factor in its training status. The goal is to determine what missions your unit can handle and

Rockets		1	2	3	4	5	6	7	8	9	10	11	12	
Troops in Open	Platoon		4	8	9	11	12	13	13	14	15	15	16	16
	Company		12	24	27	33	36	44	45	46	47	48	49	50
	No	Platoon	2	3	3	3	4	4	4	5 5 14 15	5	6	6	
Troops Dug-In	O/H	Company	6	8	9	10	11	12	13	14	15	16	17	18
	With O/H	Platoon	1	2	2	2	2	2	3	3	3	3	4	4
		Company	2	3	3	3	4	4	4	5	5	5	6	6
Artillery			Х	Х	1	1	2	2	3	3	4 4 5		5	5
Armored	Persor	nnel Carriers	Х	Х	1	1	2	2	3	3	4 4		5	5
Tanks		Х	х	Х	Х	Х	1	1	1	1	1	2	2	
Legend: No O/H = No Overhead Cover With O/H = With Overhead Cover							ver							

Figure 2: Expected Kills by Target Type. Across the top of the matrix are the number of M26 rockets fired. Down the left side are the target types. The numbers in the matrix are the casualties expected per rockets fired, based on the target types.

what missions should be reassigned to other weapons systems—before the battle.

Step 4: Do the Math. Finally, you need to calculate what ammunition is available. During this battle, 6-27 FA was under a "Do not exceed 50 percent of the UBL [unit basic load]" restriction. Therefore, of the 228 MLRS pods in our two batteries available to fire the

EFATs, we could fire only 114 of them. This was a critical degradation in killing power and key in determining our abilities to meet our EFATs.

The expected ammunition expenditure of all the EFATs given to 6-27 FA during this battle is shown in Figure 3. The figure shows the amount of ammunition needed for each EFAT, based on

EFAT	Required Kills	Pods Required	Accuracy Factor	Total Ammo Required			
1. Shoot SEAD	8 (8 Different Targets)	1	1.0	8 Pods			
2. Destroy 67% of DAG: (12) 2S5 Guns (12) BM-21s (12) 2S19s	3 (5/6 per Battery Hit) 3 (5/6 per Battery Hit) 3 (5/6 per Battery Hit)	2 2 2	1.0 4.0 3.0	6 Pods 24 Pods 18 Pods			
3a. Defeat First MRCs (50%): (2 of 3) T-80s (5 of 10) BMPs	2 (2 Different Targets) 5 (5 Different Targets)	1 1	2.0 1.0	4 Pods 5 Pods			
3b. Defeat Second MRCs (50%): (2 of 3) T-80s (5 of 10) BMPs	2 (2 Different Targets) 5 (5 Different Targets)	1 1	2.0 1.0	4 Pods 5 Pods			
4. Destroy 67% of the RAG: 3 Batteries of 2S1s 6 Batteries of 2S19s	3 (5/6 per Battery Hit) 6 (5/6 per Battery Hit)	2 2	1.0 3.0	6 Pods 36 Pods			
5. Mass at Penetration: 6 Pods							
Total Pods Required: 122 Pods							
Total Ammunition Available: (2) M270 Batteries x 114 Pods (UBL) x 50% (Ammunition Restriction) = 114 Pods							
Ammunition Shortage:	8 Pods						
Ammunition for Targets of Opportu	None						
Legend: MRCs = Motorized Rifle Companies SEAD = Suppression of Enemy Air Defense DAG = Division Artillery Group RAG = Regimental Artillery Group UBL = Unit Basic Load							

Figure 3: Initial Ammunition (Unit Basic Load) versus Ammunition Required to Accomplish the EFATs

EFAT	Required Kills	Pods Required	Accuracy Factor	Total Ammo Required	
1. Shoot SEAD	8 (8 Different Targets)	0.5	1.0	4 Pods	
2. Destroy 67% of DAG: (12) 2S5 Guns (12) BM-21s (12) 2S19s	3 (5/6 per Battery Hit) 3 (5/6 per Battery Hit) 3 (5/6 per Battery Hit)	2 2 2	1.0 4.0 3.0	6 Pods 24 Pods 18 Pods	
3. Defeat One MRC (50%): (2 of 3) T-80s (5 of 10) BMPs	2 (2 Different Targets) 5 (5 Different Targets)	1	2.0 1.0	4 Pods 5 Pods	
4. Destroy 67% of the RAG: 3 Batteries of 2S1s 6 Batteries of 2S19s	3 (5/6 per Battery Hit) 6 (5/6 per Battery Hit)	2 2	1.0 3.0	6 Pods 36 Pods	
5. Mass at Penetration:	6 Pods				
Total Pods Required:	109 Pods				
Total Ammunition Available: (2) M270 Batteries x 114 P	114 Pods				
Additional Ammunition Available fo	5 Pods				

Figure 4: Final Ammunition Expenditure Plan to Accomplish the EFATs

the number of targets to hit and the amount of ammunition planned for each target, factoring in the effectiveness rating. By subtracting the required amount from the ammunition available, you determine the shortfall or excess available. In our case, we didn't have enough ammunition to cover all our EFATs.

Here is where we earn our paychecks. We had to come up with at least eight pods of ammunition. First, we asked Div Arty to reduce the restriction on ammunition. Div Arty quickly denied our request.

Next, we reduced the fire for each SEAD target from six to three rockets (0.5 pods). These targets were less protected than the "APC" target category shown in Figure 2. Thus, the reduction still adequately met the requirements for killing each target. We presented this

logic to the Div Arty, which approved the reduction. This saved four pods of ammunition (eight SEAD targets).

Finally, the maneuver commander removed one of the MRCs from 6-27 FA's EFATs and had helicopters destroy the company. This saved nine pods, giving us the confidence that we'd have the ammunition required to accomplish the EFATs plus a few additional pods for targets of opportunity. Figure 4 shows our final ammunition plan.

After completing the four steps, the FA tactical operations center (TOC) has several decisions to make before the battle begins: Which battery shoots each EFAT—are units positioned properly? Does the ammunition need to be downloaded? Who's tracking the ammunition to specific tasks? Do force protec-

tion issues need to be solved before targets are fired? When are the fire plans going to arrive and be rehearsed?

However, finalizing the EFATs plan before determining if resources are available to execute the plan may doom at least one of your critical tasks to failure. You gain the flexibility to adjust for unplanned situations during battle when you understand your tasks, your capabilities and limitations and how resources are allocated before the battle starts. Without this attention to detail, you enter the battle guessing if you can accomplish your objectives rather than confident you can execute your EFATs.



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Redlegs work in the 6-27 FA (MLRS) battalion TOC at the NTC (1998).